

10,100,9239

10009239 112500

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
18 October 2001 (18.10.2001)

PCT

(10) International Publication Number
WO 01/76482 A3(51) International Patent Classification⁷: **G06T 9/00**[US/US]; 3 Fleetwood Drive, St. Louis, MO 63124 (US).
WHITING, Bruce, Raymond [US/US]; 1649 Ridge Bend
Drive, Wildwood, MO 63038 (US).

(21) International Application Number: PCT/US01/11510

(22) International Filing Date: 9 April 2001 (09.04.2001)

(74) Agents: **HAFERKAMP, Richard, E. et al.**; Suite 1400,
7733 Forsyth Blvd., St. Louis, MO 63105-1817 (US).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/195,376 7 April 2000 (07.04.2000) US(63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier application:
US 60/195,376 (CIP)
Filed on 7 April 2000 (07.04.2000)(71) Applicant (for all designated States except US): **WASH-
INGTON UNIVERSITY** [US/US]; One Brookings Drive,
St. Louis, MO 63130 (US).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

Published:

(75) Inventors/Applicants (for US only): **BAE, Kyongtae, T.**

— with international search report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR COMPRESSING COMPUTED TOMOGRAPHY RAW PROJECTION DATA

**A****B**

(57) Abstract: A method and apparatus for compressing computed tomography raw image data includes taking image data with a CT scan, stripping away any proprietary frame or reference data, compressing the data using a compression software such as JPEG-LS, and then storing or transmitting the data over a network or the like to another computer or storage/display device. The compression software may be conveniently stored in a computer and ready for processing of the raw CT scan data. The compressed raw CT scan data may then be used to reconstruct images, as desired, at a later date. By compressing the raw data, it is possible to later reconstruct additional or different views than those taken or used at the time of original diagnosis as may be useful for diagnosis of other medical conditions later discovered or to verify a diagnosis previously taken with the exact same data used by the medical professional during the original diagnosis. The original identifying data may also be stored and/or transmitted to allow accurate reconstruction of the original views.

WO 01/76482 A3